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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/878,272	06/12/2001	Yoshinori Tanaka	011350-275	3124

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EXAMINER

MILIA, MARK R

ART UNIT PAPER NUMBER

2625

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/878,272

Applicant(s)

TANAKA, YOSHINORI

Examiner

Mark R. Milia

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-33 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 and 7-18 is/are allowed.
- 6) ☒ Claim(s) 19-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment was received on 2/1/06 and has been entered and made of record. Currently, claims 1-5 and 7-33 are pending.

Response to Arguments

2. Applicant's arguments, see pages 2-8, filed 2/1/06, with respect to claims 1-5 and 7-18 have been fully considered and are persuasive. The rejection of claims 1-5 and 7-18 has been withdrawn.

3. Applicant's arguments, see pages 2-8, filed 2/1/06, with respect to the rejection(s) of claim(s) 19-33 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of a different interpretation of previously cited prior art.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 19, 20, 22, 24, 25, 27, 29, 30, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5960109 to Shiau in view of Arakawa.

Regarding claims 19, 24, and 29, Shiau discloses an image processing system comprising: a processor for generating a set of data from raster image data including line graphics that form an area surrounded by the line graphics (see Figs. 5, 6, and 15, column 1 lines 18-28, and column 10 line 42-column 11 line 10), the set of data including (2) information on line widths of the line graphics (see Figs. 5 and 15 and column 10 lines 42-62, reference states that in the process of analyzing the color marker data, which is the line graphic that surrounds an image, that the pixels within the marker area and the pixels outside the marker area are determined, all of which would yield the line width of the color marker), (3) information on a first color of the line graphics (see Fig. 15, column 1 lines 32-40, column 2 lines 11-21, and column 18 lines 20-32), and (4) information on a second color of the enclosed area (see Fig. 15, column 11 lines 11-35, and column 18 lines 5-19).

Shiau does not disclose expressly (1) vector data tracing the line graphics.

Arakawa discloses (1) vector data tracing the line graphics (see Drawing 5 and paragraphs [0010], [0016]-[0018], and [0019] lines 1-2).

Shiau & Arakawa are combinable because they are from the same field of endeavor, manipulation of graphic images.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the vector data tracing the line graphics, as described by Arakawa, with the system of Shiau.

The suggestion/motivation for doing so would have been to accurately discern the location of the line graphic to ensure proper manipulation of the image inside the line graphic and the area outside the line graphic.

Therefore, it would have been obvious to combine Arakawa with Shiau to obtain the invention as specified in claims 19, 24, and 29.

Regarding claims 20, 25, and 30, Shiau further discloses wherein the processor selects a plurality of internal points within the area and detects the second color based on color information of the plurality of internal points (see Fig. 15, column 11 lines 11-35, and column 18 lines 5-19).

Regarding claims 22, 27, and 32, Arakawa further discloses wherein the processor generates the vector data by converting the line graphics into core line graphics (see Drawings 5 and 7 and paragraphs [0014]-[0018]).

6. Claims 21, 26, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiau and Arakawa as applied to claims 20, 25, and 30 above, and further in view of Behlok.

Shiau and Arakawa do not disclose expressly wherein the processor generates a histogram of the color information of the plurality of internal points.

Behlok discloses wherein the processor generates a histogram of the color information of the plurality of internal points (see column 5 lines 36-39 and column 6 lines 46-67).

Shiau, Arakawa, & Behlok are combinable because they are from the same field of endeavor, manipulation of graphic images.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the use of histograms for color detection of Behlok with the system of Shiau and Arakawa.

The suggestion/motivation for doing so would have been provide a more accurate color and modification detection system (see also column 4 lines 12-25 of Behlok).

Therefore, it would have been obvious to combine the histogram aspect of Behlok with Shiau and Arakawa to obtain the invention as specified in claims 21, 26, and 31.

7. Claims 23, 28, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiau and Arakawa as applied to claims 19, 24, and 29 above, and further in view of Iijima.

Shiau and Arakawa do not disclose expressly wherein the processor compares the line widths of the line graphics with a specified threshold value and generates the vector data according to comparison results.

Iijima discloses wherein the processor compares the line widths of the line graphics with a specified threshold value and generates the vector data according to comparison results (see column 4 lines 14-36 and 52-65, column 7 lines 10-25, and column 7 line 44-column 8 line 3, reference discloses a method for determining the

thickness of a line contained in a digital document by comparing the line to known values of lines that are thin, medium thickness, or thick and being able to change thickness along with color for future processing and reproduction).

Shiau, Arakawa, & Iijima are combinable because they are from the same field of endeavor, manipulation of graphic images.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the thickness and alteration method of Iijima with the system of Shiau and Arakawa.

The suggestion/motivation for doing so would have been to allow a user to alter the thickness of a line graphic to allow the image to be scaled up or down without having the line graphic become too large or too small.

Therefore, it would have been obvious to combine Iijima with Shiau and Arakawa to obtain the invention as specified in claims 23, 28, and 33.

Allowable Subject Matter

8. Claims 1-5 and 7-18 are allowed.

9. The following is a statement of reasons for the indication of allowable subject matter:

The examiner believes that it would not have been obvious to one of ordinary skill in the art at the time the invention was made to combine detection of a color within an extracted enclosed area, the area enclosed by an extracted line graphic, and the

detection of a color of the line graphic, with the other limitations as set forth in the claims.

Conclusion

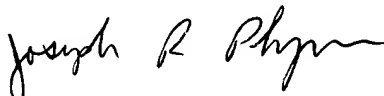
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Milia whose telephone number is (571) 272-7408. The examiner can normally be reached M-F 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached at (571) 272-7406. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark R. Milia
Examiner
Art Unit 2625

MRM


JOSEPH R. POKRZYWA
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